

HVAC

VARIABLE FREQUENCY DRIVE BYPASS FOR CONTINUOUS OPERATION

Customers

Applicable to property management companies, building owners or operators responsible for large commercial, multi-tenant, and multi-family buildings, office blocks or manufacturing plants and facilities.

The Challenge

Managing buildings located in some of the hottest, humid cities in the US can be challenging. Maintaining comfortable living or working conditions is a critical function, especially during summer months and the hurricane season. There is also a need to reduce HVAC system operating costs with the use of Variable Frequency Drives to efficiently control motors and fans is an ideal solution.

The Solution

Adding a bypass unit to a variable frequency drive that runs the HVAC system allows the drive to be removed from the HVAC system's electrical loop while the system continues to operate. The bypass can be manually initiated in the event of a failure, to allow maintenance or repair, or during building systems commissioning and start-up. This guarantees continuous HVAC system operation, maintaining a comfortable environment for building occupants.



WORLDWIDE
ELECTRIC CORPORATION



User Benefits

The Worlddrive Flex Control VFD Bypass Panel provides the following benefits in this application:

- Slim, compact design installed in a small control room.
- Display of system operation and fault status on the VFD Display.
- Manual selections for automatic operation or bypass.
- Additional safety modes, such as Motor Overload (OL), Trip Detection
- Operation in accordance with building safety codes, including Fire Mode.
- Building automation system integration using built in BACnet communications.
- Connection to building sensors using 3 of the five built-in relay outputs.
- 100 kA SCCR rated to cover the required operator safety and insurance requirements.